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ABSTRACT

This collection of abstracts is part of a continuing series providing information on recent doctoral dissertations. The 21 titles deal with a variety of topics, including the following: children's development of syntactic aspects of reading comprehension, the relative contributions of the individual and the text in the comprehension and retention of connected discourse, the relationship between semantic memory retrieval abilities and prose memory outcomes, the perception of shape and letter cues in reading, factors related to the amount of subvocalization exhibited during reading, a mathematical model of word recognition strategies, the effect of prose organization upon recall organization, the resolution of anaphora in written discourse, the relative efficiency of silent and oral reading performance, the effects of oral and written language patterns on comprehension among beginning readers, the context bound effects of picture-text amalgams, the influence of reading ability and mode of presented information on the perception of events, the structure of semantic memory for text, the influence of world knowledge and metacomprehension ability on children's comprehension of short narrative passages, and children's sensitivity to the relative importance of parts of prose. (GT)

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CHILDREN'S DEVELOPMENT OF SYNTACTIC ASPECTS OF READING COMPREHENSION: PRONOUN-REFERENT STRUCTURES Order No. 7913379

BARNITZ, John Gerard, Ph.D. University of Illinois at Urbana-Champaign, 1978. 159pp.

This experiment was conducted to understand the development of comprehension of pronoun-referent structures involving the pronoun "it" by standard English speaking children in grades 2, 4, and 6.

In each grade, comparisons within linguistic factors were made:

1. Referent Type: Pronoun-referent structures where the referent is a noun or noun phrase (NP) vs. Pronoun-referent structures where the referent is a clause or sentence (S).
2. Reference Order: Pronoun-reference structures where the pronoun follows its antecedent (Forward Reference, FW) vs. pronoun referent structures where the pronoun precedes its referent (Backward Reference, BW).
3. Referent Distance: Pronoun-referent structures where the pronoun and referent are within the same sentence (Intra) vs. structures where the pronoun and referent are located in separate sentences (Inter).

These structures were embedded into experimental passages of eight different passage types: NP(FW, Intra), NP(BW, Intra), NP(FW, Inter), NP(BW, Inter), S(FW, Intra), S(BW, Intra), S(FW, Inter), and S(BW, Inter). Four passages were constructed with each of these possible antecedents for the pronoun, one correct antecedent and two distractor items. The forward and backward versions of a story containing the same referent type and referent distance were written with the same content to control for background knowledge influences on the structure. The two versions of each story were alternately assigned to two forms of experimental booklets. Thus, each booklet had the same number of forward vs. backward structures; but no booklet had two versions of the same passage. In the experimental booklet, each of the 16 passages is followed by a question asking a child to recall the antecedent.

The three schools in which the experiment took place serve a predominantly "blue collar" or working class community in East Central Illinois. Protocols of second graders reading below grade level or having significant decoding difficulty were eliminated on the basis of standardized achievement test scores and/or teacher judgements on survey sheets. Furthermore, protocols of children of below average intelligence were not included. This was done to guarantee that all the native English speaking children had enough reading ability and intelligence to perform the task. The mean reading levels for the children whose booklets were used in the analysis were at grade level.

The children were tested within their regular class. Each child was handed one of the two forms of the experimental booklet and was asked to read each story and answer one question based on each story.

Analyses of variance were applied to the data. Along the dimension of referent type, passages containing pronoun-referent structures where the referent is a noun phrase had significantly higher scores than passages with structures where the referent is a sentence. Along the dimension of reference order, passages with forward reference order also had significantly higher scores than passages with backward reference order. There was a strong trend within passages with intra-sentential structures: forward reference had higher scores than backward reference. Yet the reference order factors had less effects on inter-sentential structures. Along the dimension of referent distance, intra-sentential pronoun-referent structures were not significantly higher than inter-sentential structures. Yet for sentence pronominal structures, intra-sentential pronominals had higher scores than inter-sentential pronominals. The opposite occurred for passages with noun phrase pronominals. Although some pronoun-referent structures are well comprehended by second grade (e.g., NP(FW, Intra)), the comprehension of other structures are still being developed well into the middle grades.

These findings are discussed in the light of research findings in reading, linguistics, and psycholinguistics.

THE RELATIVE CONTRIBUTIONS OF THE INDIVIDUAL AND THE TEXT IN THE COMPREHENSION AND RETENTION OF CONNECTED DISCOURSE Order No. 7902573

BARTOLI, Angela Mary, Ph.D. The Pennsylvania State University, 1978. 136pp. Adviser: Francis J. DiVesta

The purpose of the present investigation was to determine the relative contributions of the reader via his schematic knowledge and the text, its structure and content, to the comprehension and retention of connected discourse. The index of the differential contributions of the reader and the text was the accuracy to which textual input was retained.

One hundred and forty-four male and female undergraduates were asked to read a passage which was either familiar, partially familiar, or unfamiliar and was presented in either organized or randomized sentence structure. Immediately following passage reading and after a one-week delay, subjects were administered recognition tests. The recognition tests consisted of 12 foils each. The foils were sentences of the original passage transformed to correspond to a continuum reflecting association theories of memory at one end to constructive theories of memory at the other end. The design implied was a 3 X 2 X 2 X 6 mixed ANOVA with two between-subjects factors (familiarity and organization) and two within-subjects factors (test delay and test foils).

Subjects reading familiar materials falsely recognized lexical, synthesized, and inferential foils; whereas they accurately recognized semantic foils. Subjects reading partially familiar and unfamiliar text accurately recognized syntactic, lexical, synthesized, and inferential foils, although they failed to recognize semantic foils. No significant effect of organization of text was obtained. Information held over time was semantic for subjects reading familiar material and syntactic for subjects reading less familiar text. Thus, when internal organization is stable relative to the textual message, there is a decreased reliance on external organization (text) for comprehension and retention. On the other hand, when internal organization is poor, there is an increased reliance on external organization for retention.

PROSE MEMORY OUTCOMES AMONG SIXTH-GRADE STUDENTS AS A FUNCTION OF SEMANTIC MEMORY RETRIEVAL ABILITIES Order No. 7824849

BLEAKLEY, Joseph John, III, Ph.D. University of Kansas, 1978. 199pp. Adviser: Donald J. Treffinger

This study examined the relationship between the memory outcomes exhibited after reading a short prose passage and ability to access and use information from semantic memory. Three memory outcomes were examined: memory for information expressed in the text (reproductive memory), for information inferred from it (constructive memory), and for information added to it during retrieval (reconstructive memory). Use of information from semantic memory has been described by Guilford (1967) as involving two sets of intellectual abilities that he calls divergent production and convergent production. Both sets of abilities involve retrieval of information from memory storge in order to meet certain criteria, but divergent production is used when the situation calls for a variety of responses, and convergent production when a single, best response is produced. This study examined how divergent and convergent production abilities among sixth-grade students helped to explain individual differences among the three prose memory outcomes.

Research has shown that what one is able to learn and remember is a function of what one already knows. This store of general background knowledge is represented in memory in the

form of schemata. The schemata are used during information processing to facilitate the comprehension, acquisition, retention, and retrieval of new information. However, these schemata need to be retrieved from semantic memory in order to be applied to the processing of incoming information. Since individuals use data retrieved from semantic memory while learning and remembering, it was hypothesized that a general ability to address, retrieve, and use one's general store of knowledge would be directly related to reproductive, constructive memory outcomes among sixth-grade students.

The sixth graders were given a series of twelve tests that measured their semantic divergent and convergent production abilities. An additional test measured their ability to retrieve word meanings from memory. The three memory outcomes were measured using a recognition format test given one week after reading the learning passage. Relationships among the variables were assessed with canonical, multiple, and simple correlations.

The results demonstrated that for sixth graders there was no overall relationship between the divergent and convergent abilities measured and the three memory outcomes. In other words, individual differences in the general ability to retrieve various kinds of information in response to a large variety of tasks did not significantly account for any of the variance of very specific memory tasks. Apparently, what is important in a memory task is not the general ability to retrieve information from semantic memory without respect to the content of the task. Rather, what is important is the ability to retrieve information that is directly related to that content. That is, the possession of schematic knowledge that is directly related to the material to be learned is what is important in predicting memory outcomes, not the general ability to retrieve information from memory. If the learning material concerns a very common theme ("George Washington"), retrieval of relevant schemata during comprehension and retrieval is seemingly automatic and is not related to individual differences in semantic memory retrieval abilities. If the theme is not common, a different pattern of results might be obtained. The lack of relationship between DP, CP, and prose memory may also address possible theoretical or operational limitations of Guilford's model of intelligence and the resulting factor tests. The specificity with which the SOI can relate to prose memory phenomena was discussed.

Previous research has shown that constructive memory is not obtained under certain circumstances. That outcome was also found in this study. However, the reliable demonstration of reconstructive memory outcomes confirmed the existence of an abstract and integrated representation of prose in memory. Finally, it was found that reproductive and reconstructive memory were positively related rather than the reverse, which might be expected.

THE PERCEPTIBILITY OF WORD SHAPE AND LETTER CUES IN FOVEAL AND PERIPHERAL VISION UNDER THREE CONTEXT CONDITIONS Order No. 7912834

BRAY, Gayle Babbitt, Ph.D. The University of Iowa, 1978. 149pp. Supervisor: Associate Professor Joyce E. Hood

This study was designed to investigate the perception of shape and letter cues in reading, both in foveal and peripheral vision, and to examine the influence of preceding context on the perception of these cues.

Sixty subjects were tachistoscopically presented sentence beginnings (or random strings of words) to read aloud. After focusing on a fixation arrow, subjects saw the continuation of a sentence beginning (the test field) for 150 milliseconds. A single word (the probe) appeared for four seconds immediately after the test field disappeared. Subjects said "yes" if the probe was the same word that had appeared in that position in the test field. Twenty of the subjects read sentence beginnings shown by a cloze test to create high expectation for a certain word in the test field. Another twenty read sentence beginnings that created about equal expectation for either of two words. The third group read random strings before seeing the test field.

Test fields were identical for all three groups. Words were probed at two distances from the fixation point (from fixation to 1.32° and from 1.32° to 2.64° to the right of fixation). Although the probe was always a real word that fit the facilitating and neutral contexts and the test field continuation, the probed test field word was either: (1) identical to the probe, (2) a real word that differed from the probe by one letter, shared its shape and general word frequency, and fit the neutral context only, (3) a nonsense string of first-order approximation to English that shared shape with the probe, or (4) a nonsense string of first-order approximation to English that did not share the probe's shape.

Because many subjects exhibited a "no"-guessing bias when unsure of a response, error scores were transformed into d' scores, (Swets, 1964) before being analyzed by means of a mixed three-way analysis of variance.

Subjects presumably compared the probe to the icon of the test field. Thus the lack of a statistically significant difference among context group means was taken as evidence that context does not affect perception. Information-processing theories (Gough, 1976; Haber & Hershenson, 1973) maintain that the facilitating effect of within-word sequential redundancies is not realized at the level of perception but at later stages of processing. The across-word sequential redundancies provided by context in this experiment apparently behaved similarly. These results are at odds with Goodman's (1976) model, which maintains that context lightens the perceptual load, making it unnecessary for the reader to perceive all of the visual cues. The results likewise offer no support for Marcel's (1974) claim that increased contextual constraint creates spare visual processing capacity for use farther into the periphery.

Visual sensitivity to shape and letter characteristics of the stimulus was much higher close to fixation than in the periphery, although even in the periphery there was a statistically significant difference (.05) in responses to two words which differed by as little as one letter and shared shape. Thus, visual acuity in the near periphery (1.32° to 2.64° to the right of fixation), though not as great as that of the fovea, is still sufficient to enable specific letter information to be perceived. There was no evidence that stimuli sharing only shape characteristics (but no individual letters) with the probe were systematically confused with the probe in either the foveal or peripheral areas. Thus, the study found no evidence that external word shape, independent of the letters making up the word, is used as a basis for identifying words in the near peripheral (or in the foveal) areas.

THE RELATIONSHIP OF READING ABILITY, FREEDOM FROM DISTRACTIBILITY, VERBAL KNOWLEDGE AND ABILITY, AND SEX TO AMOUNT OF SUBVOCALIZATION IN READING Order No. 7901622

BRISTOW, Page Simpson, Ph.D. University of Georgia, 1978. 101pp. Supervisor: Dr. Ira E. Aaron

This study was designed to determine whether verbal knowledge and ability, reading ability, sex, and freedom from distractibility are related to amount of subvocalization exhibited during reading, either individually or as a set. Because of short-term memory involvement in the freedom from distractibility measures, the relationships of these tests with subvocalization were investigated both as a composite score (as a measure of freedom from distractibility) and also as separate independent variables along with the other variables, both individually and as a set.

The term subvocalization, refers to lip movements, whispering, or reading aloud during reading. Subvocalization was measured by observing the proportion of test items on which each subject exhibited subvocalization during administration of the measure of reading ability. Freedom from distractibility was defined as the ability to remain undistracted (to attend to or concentrate), and was measured by a composite score of the subjects' scaled scores on the Coding, Arithmetic and Digit Span subtests of the Wechsler Intelligence Scale for Children-Revised (WISC-R). Verbal knowledge and ability was measured

by the WISC-R Vocabulary subtest, while reading ability was measured by the Passage Comprehension subtest of the Woodcock Reading Mastery Tests. The tests were all individually administered to the subjects by the investigator using the standardized procedures specified.

The sample consisted of 45 girls and 31 boys who were randomly selected from fifth graders in a predominantly upper middle class, suburban community in southeast Wisconsin.

Person product moment correlations, multiple correlations, and multiple regression analyses were used to test the eleven hypotheses. The .05 level of probability was used to designate significance.

The results indicated that:

1. There was not a significant relationship between amount of subvocalization and verbal knowledge and ability, reading ability, sex, or freedom from distractibility, or the combination of these variables.

2. There was not a significant relationship between amount of subvocalization and the WISC-R Coding subtest scores.

3. There was a small but significant negative relationship of -.25 between amount of subvocalization and scores on the WISC-R Digit Span subtest.

4. There was a small but significant positive relationship of .28 between amount of subvocalization and WISC-R Arithmetic subtest scores.

5. There was a moderate relationship of .46 between subvocalization and the combination of verbal knowledge and ability, reading ability, sex, and the separate measures of freedom from distractibility. However, 19 percent of the explained variance in amount of subvocalization was contributed by the combination of the WISC-R Arithmetic and Digit Span subtest scores alone, while the addition of all the other variables only added 2.8 percent to prediction of amount of subvocalization. The small difference between a shrunken multiple R computed and each multiple R including Arithmetic and Digit Span indicated that the multiple R's were good estimates of what could be expected in the population.

6. When verbal knowledge and ability, reading ability, sex, and the WISC-R Coding, Digit Span, and Arithmetic subtests were entered into a multiple regression equation in the order stated here, only the WISC-R Digit Span and Arithmetic subtests added a stable amount to prediction beyond that added by the sets of predictors which preceded each of them in the equation.

The findings are discussed in terms of the short-term memory involvement in the WISC-R Arithmetic and Digit Span subtests and the role of subvocalization and inner speech in short-term memory, attention, and concentration.

The findings concerning the lack of relationship between reading ability and subvocalization are compared to other related studies. The possibility that the cloze task used to measure reading ability in this study tended to encourage subvocalization is also discussed.

A FACTOR ANALYSIS OF READING USING NONVERBAL AND VERBAL COGNITIVE TASKS Order No. 7910271

BROWN, Rita Sheila, Ph.D. Hofstra University, 1979. 202pp.

1. The major purpose of the investigation was to examine four cognitive abilities that have been theoretically identified as underlying the reading process. Since on-going reading is a very complex process, the procedure was to administer tests referenced to the cognitive abilities and evaluate the results in relation to reading achievement. The dimension investigated was response to figural and symbolic content of stimuli for sixth grade subjects.

2. Based on the theoretical view of reading as involving cognitive abilities of 1) selecting partial information from the perceptual input and recognition and completion of the partial stimuli (Cognition of Figural and Symbolic Units, Convergent Production of Figural Transformations), 2) recognition of embedded information (Cognition of Figural Relations and Units and Cognition of Symbolic Units, Convergent Production of Figural Trarsformations), 3) discovery and recognition of systems for hypothesis formulation and testing (Cognition of Symbolic Systems), and 4) perceptual speed adequate for the retaining of information in the on-going process (Evaluation of Figural Units), a review was conducted of factor-referenced cognitive tests.

3. A published test which does not utilize language in the test items was selected for each of the cognitive abilities under investigation as a nonverbal factor-referenced cognitive test. A verbal factor-referenced cognitive test was constructed for each of the cognitive abilities under investigation so that the tasks composing the tests utilize language familiar to sixth grade students. Factor findings and classification schemes of Thurstone, Guilford, Cattell, Ekstrom et al., Carroll, Harris and Harris, and Horton were discussed in regard to classification scheme and findings in the investigation.

4. The findings of the intertest correlations, factor analyses, and stepwise multiple regression analyses were used for testing the hypotheses and for the conclusions. The implications were largely based on the factor analyses because they were concerned with factors underlying reading.

5. Five factors with significant loadings were obtained, labeled, and their structures identified. The structures of the two major reading factors obtained are summarized as follows:

a. The Primary Reading Factor was for the primary loadings of all of the reading achievement measures and identified in terms of the significant loadings for the nonverbal and verbal cognitive tasks.

1. Ability to complete partial information based on verbal symbolic characteristics of the stimulus (Cognition of Symbolic Units).

2. Ability to recognize embedded information based on nonverbal figural characteristics of the stimulus (Cognition of Figural Units and Relations and Convergent Production of Figural Transformations).

3. Perceptual speed ability based on the nonverbal figural characteristics of the stimulus (Evaluation of Figural Units).

b. The Secondary Reading Factor for Cloze and Reading Vocabulary and its strongest loadings for the verbal factor-referenced cognitive tests. Its structure was inclusive of the above and in addition the ability to recognize embedded information based on verbal symbolic characteristics of the stimulus (Cognition of Symbolic Units), the ability to discover systems for hypothesis formulation and testing based on verbal symbolic characteristics of the stimulus (Cognition of Symbolic Systems), and perceptual speed ability based on verbal figural characteristics of the stimulus (Evaluation of Figural Units).

6. The conclusions served to answer the research problems that were posed.

7. Implications for reading theory and research and for practice were presented.

A MATHEMATICAL MODEL OF WORD RECOGNITION STRATEGIES Order No. 7903491

CHIN-CHANCE, Selvin Augustus, Ph.D. University of Hawaii, 1978. 170pp.

This study attempted to demonstrate that it is possible to calculate a multiple regression equation which will describe which word features an individual is consistently using in comparing words. The multiple regression technique was hypothesized to be superior to previous techniques which focused on describing a single feature comparison strategy. By employing a regression technique, a simultaneous analysis of the various kinds of word features being used by an individual could be made. Of the five classes of word features described by Gibson and Levin (1975), visual, syntactic and phonemic features were ones used in this study.

The first step in attempting to support the hypothesis that an individual's word comparison strategy can be described by a multiple regression equation required the construction of measures of word features. Only word features for which valid and reliable measures could be constructed were used.

These included measures of visual similarity, syntactic and phonemic features. The measure of visual features expanded on the work of Dunn-Rankin (1968) dealing with letter similarity; those on phonemic features analyzed the data contained in the works of Miller and Nicely (1961), and Fairbanks and Grub (1961) dealing with phonemes using Shepard's (1962a) multidimensional technique; and the syntactic measure was derived from a study which estimated the similarities in meaning between words based on the responses of a group of college students.

By asking individuals to indicate the overall similarity between selected word pairs, it was possible to calculate a multiple regression equation which describes which word features (independent variables) an individual was consistently using in comparing words. The procedure uses the estimates of the various word similarity features as data points for the independent variables and the individual's responses as data points for the dependent variable. Using a stepwise regression technique, the beta weights associated with each independent variable were calculated. It is assumed that a statistically significant beta weight is an indication that the individual has employed this feature in his overall strategy in comparing the words.

The procedure was successful since at least two-thirds of the multiple linear regression equations calculated contained significant beta weights for one or more of the word features. A more stringent criterion ($R^2 \leq .25$) of "practical" significance was applied and approximately one-half of the multiple linear regression equations qualified as being "practically" significant.

The features most frequently found to have significant beta weights were, first letter, last letter, and meaning. Visual similarity followed next with phonemic and ascending and descending letters being hardly used by the subjects. Further analysis indicated that reading ability was related to the predictive power of the regression equation. It was also determined that there did not seem to be any "rigid" type of strategy associated with reading level. The major determinant seemed to be consistency in the application of the individual's strategy. Various flaws in the instrument, sample, and the methods of measuring the word features were discussed. The lack of sample representativeness was cited as being a major factor in limiting the generalization of the findings and confirmation of any developmental trends. Because of the relatively conservative methods used to derive the values for the indices in that similarities were always underestimated if insufficient data was present, there may have been a tendency for the procedure to decrease the R^2 for the calculated equations. Suggestions were made to improve some of the measures and to insure stricter controls over various aspects of the study.

ORGANIZATION OF PROSE: ITS EFFECT UPON RECALL ORGANIZATION Order No. 7822245

CLARK, Charles Hathaway, Ph.D. The University of Wisconsin-Madison, 1978. 109pp. Supervisor: Professor Frank H. Farley

Previous work in the areas of word list learning and prose recall has suggested that subjects will organize unorganized verbal input during processing. Such reorganization is apparently quite complete, though the additional processing demands tend to decrease the amount which can be recalled. Additionally, subjects who read organized material tend to recall superordinate information better than subordinate information. Though prior research dealing with organizational aspects of prose and recall suggest that subjects are capable of reorganizing, there has been little if any work directly aimed at qualifying the degree of subject reorganization. Fifty-six university students who served as subjects were randomly assigned to one of eight experimental conditions. There were 45 females and 11 males. The design was a 4 x 2 factorial. Subjects silently read one of four versions of a passage at 150 words per minute on a Lafayette Instruments memory drum. The 530 word passage was modified such that the sentence order in the first and second halves was either in its natural order or randomized, resulting in four possible combinations: normal/normal, normal/random, random/normal, or random/random. Additionally, half of the subjects were informed prior to reading of the structure of their passage and half were not. All subjects were tested individually and test for immediate written free recall. Both the stimulus passage and all subject protocols were analyzed into a sequential list of propositions. Kendall tau rank order correlations indicated no significant general effect of the conditions on recall organization. Both independent variables significantly affected the amount subjects recalled. Informed subjects recalled less than the non-informed subjects and the randomized passage conditions resulted in less recall for all subjects. An analysis of the mean hierarchical level of propositions recalled yielded no significant effects for either of the experimental variables.

AN INVESTIGATION OF THE RESOLUTION OF ANAPHORA IN WRITTEN DISCOURSE Order No. 7905006

DETORE, Elizabeth Ann, Ed.D. Boston University School of Education, 1978. 119pp. Major Professor: James Flood

The purpose of this study was to investigate (1) the development of ability to perform inferences in resolving anaphora in written discourse, and (2) the relationship between reading achievement and anaphora resolution ability. Ten types of anaphora, classified by types of inference required for their resolution, were selected. Passages from third, sixth, ninth, and twelfth grade texts were chosen. Each passage contained these types of anaphora. Students were asked to read one selection from a social studies text at their grade level, and they were asked to identify the antecedents of the ten anaphora. The study was conducted on a sample of 201 students from grades 3, 6, 9, and 12 in a suburban community of Boston.

The following measures were administered:

1) Form 2M of the Gates-MacGinitie Reading Tests to yield reading comprehension scores.

2) The Otis-Lennon Mental Ability Test to yield IQ scores.

The quantifiable data were analyzed by computing two multiple regressions, one with age as a criterion variable and one with reading comprehension as the dependent variable.

The results of the regression with age, coded as grade, indicated that seven types of anaphora--subjective, directive, objective, stative, negative, temporal, and instrumental--were significant at the .05 level in one or both contexts.

The regression with reading comprehension demonstrated that objective anaphora was the best predictor of reading achievement and nine of the ten types of anaphora--subjective, directive, objective, negative, spatial, instrumental, and temporal--were significant in the science and/or social studies material.

Results suggest that there is a developmental pattern as inferences to resolve anaphora become more complex, and that these inferential skills affect comprehension.

AN INVESTIGATION OF THE RELATIVE EFFICIENCY OF SILENT AND ORAL READING PERFORMANCE IN GRADE 7 Order No. 7911369

GARABEDIAN, Helen, Ph.D. The University of Connecticut, 1978. 152pp.

Problem: to obtain some objective evidence concerning the relative efficiency of oral and silent reading performance in grade 7 as measured by an individualized reading test.

Hypotheses: The following hypotheses were tested at the five per cent level of confidence. Performance scores were determined by the Gilmore Oral Reading Test, Forms C and D.

1. There is no significant difference in the oral and silent reading performance scores of seventh grade students as measured by an individual reading test.

2. There is no significant difference between the silent and oral reading performance scores among males and females in grade seven.

3. There is no significant difference between oral and silent reading performance scores among students in grade seven from varying levels of socio-economic status.

4. There is no significant difference between the silent and oral reading performance among students in grade seven of different levels of intelligence.

5. There is no significant difference between silent and oral reading rate scores of students in grade seven.

Population: eighty-four randomly selected English speaking students from the seventh grades of junior high schools in a medium sized urban community in Connecticut. Forty-two girls and forty-two boys were selected.

Procedures: Alternate forms of the Gilmore Oral Reading Test, Forms C and D, were individually administered, one orally and one silently, starting one level below grade placement. A base and a ceiling level were determined for each student as the basis for the performance score. Time needed for reading selections below the ceiling level were recorded and averaged to provide an oral and a silent reading rate.

The Index of Social Position by Hollingshead and Redlich was utilized to determine the socio-economic status based on the father's or sole working guardian's occupation. Results of the intelligence test administered by the school system in September of grade seven provided IQ scores for this study.

Findings: Conclusions drawn through the statistical analysis of the data gathered in this study were as follows:

1. Oral reading performance of seventh graders was significantly higher than silent reading performance; however, when reading performance was controlled for the variable of rate, there was no significant difference between oral and silent reading.

2. There was a significant degree of correlation among oral and silent reading performance and silent reading rate of seventh graders; oral reading rate was not related to either oral or silent reading performance.

3. There was no significant difference between oral and silent reading performance of males and females in grade seven, although males scored higher than females in both oral and silent reading performance.

4. There was no significant difference between the oral and silent reading scores of seventh graders from different levels of socio-economic status. However, there was a trend indicating students of high SES achieved higher scores in both oral and silent reading performance than students of low SES.

5. There was a significant difference between the oral and silent reading performance scores of seventh graders of different levels of intelligence. Those with high IQ achieved higher scores in both oral and silent reading performance than students with low IQ.

6. There was a significant difference between oral and silent reading rate; seventh graders read faster silently than orally.

7. There was a significant degree of correlation between oral and silent reading rate.

Implications: Although silent reading rate is faster than oral reading rate, seventh graders appear to recall more details when they read orally. Predicting silent reading behavior on the basis of an oral reading test, or the reverse, may be misleading.

THE EFFECTS OF ORAL AND WRITTEN LANGUAGE PATTERNS ON COMPREHENSION AMONG BEGINNING READERS

Order No. 7910049

GARDNER, Dorothy Jean, Ph.D. Temple University, 1979. 210pp.

Statement of Problem

This study was designed to investigate the effects of varying degrees of similarity of oral and written patterns of language structure on children's reading comprehension at the beginning reading level. Within the variable of sex, the language patterns of girls as compared to boys in relation to reading comprehension was examined.

Procedure

Subjects were randomly selected from a population of approximately three hundred and sixty (360) pupils, enrolled in twelve suburban Philadelphia, Pennsylvania Schools. Pupils were limited to those of average intelligence based on the Slosson Intelligence Test. Subjects who scored instructionally at the first reader level according to the Temple Informal Reading Inventory were selected.

Twenty-five language patterns from four different situations were collected on all subjects. Language patterns were classified according to Strickland's (1962) tabulation of the frequency with which certain patterns appear in the oral language of first graders. Following the collection procedure, comprehension tasks for frequent and infrequent language patterns of the children in this study were developed by the investigator. The tasks were constructed according to Tatham's (1969) study. Certain restrictions were imposed on the materials to assure similar content and complexity from test to test.

Subjects were administered the two sets of comprehension tasks in three separate testing sessions. Correct responses on comprehension tasks of frequent and infrequent language patterns were totaled.

Four hypotheses were tested to measure the difference within the variables of sex and patterns of subjects' reading comprehension of materials written with frequent oral language patterns as compared to their reading comprehension of material written with infrequent oral language patterns. Hypothesis five tested whether there will be a significant relationship between the frequency of pupils' oral language patterns produced and their comprehension scores on the same patterns.

The data pertaining to the first four hypotheses were analyzed by a 2 (Sex of Reader) X 2 (Pattern of material) analysis of variance with repeated measures on the second factor. The dependent measure was the mean number of correct responses on the content pictures. Post hoc analysis involved the use of the Tukey Statistical Technique. Data pertaining to hypothesis five were analyzed by a Pearson produce-moment coefficient of correlation and multiple regression.

The level of confidence for all hypotheses to be accepted was the .05 level of statistical significance.

Results

All four hypotheses were accepted. Hypothesis five revealed a significant relationship between pupils' pattern production and their comprehension scores on the same patterns.

Conclusions

Beginning readers tend to comprehend materials produced with frequently used oral language patterns better than they comprehend material produced with infrequently used language patterns.

Beginning reader girls comprehend material produced with frequently used oral language patterns better than they comprehend material produced with infrequently used oral language patterns.

There is a significant difference between the performance of females and males in the comprehension of frequent oral language patterns. Beginning reader boys comprehend mate-

rials produced with frequently used oral language patterns better than boys comprehend materials produced with infrequently used oral language patterns.

There is a significant relationship between the patterns produced and the comprehension of those patterns among first graders.

Beginning readers' ability to expand the oral language patterns that he speaks appear to be a better indicator of his reading achievement than his ability to speak complex patterns.

Negatives and passive within certain frequently produced oral language patterns interfere with the beginning readers comprehension of sentences more often than negatives and passives within patterns that appear infrequently in their oral language.

THE CONTEXT BOUND EFFECTS OF PICTURE-TEXT AMALGAMS: TWO STUDIES Order No. 7902321

GARRISON, William Toolan, Ph.D. Cornell University, 1978. 97pp.

Research in the area of picture-text amalgams has failed to uncover generalizable effects or simple rules of functioning. Such work has also shed little light upon the processing of pictorial stimuli utilized in conjunction with text materials. It is the main thesis of these studies that researchers, in the main, have not recognized the context bound nature of picture-text amalgams. This insensitivity to contextual factors has led to a surprising lack of knowledge or agreement concerning the specific and practical augmentation of picture aids with text. These studies sought to examine the role which two contextual variables play in determining the differential utility of picture aids included with text. The first factor of interest was the Level of Meaningfulness of Content to Learner. The second factor was concerned with differences between various dependent measures used in the experimental setting.

Study One investigates the differential processing and performance outcomes which result from inclusion of picture aids under two conditions of content meaningfulness. Subjects were college undergraduates, aged 18 to 22. Measures of study time, problem solution time and delayed recall were taken. Conclusions resulting from this study include: (1) pictures are processed quite differently depending upon the level of familiarity with content, and (2) pictures are useful in delineating relationships among concepts which are marginally meaningful to learners.

Study Two sought to understand the general inability to detect facilitating effects from pictorial stimuli which accompany children's basal readers. Level of meaningfulness of content was varied based upon normative data collected from 143 children's composed outcomes to partially completed stories. Subjects were 20 children, ages ranging from 8 to 11 years. Tape recorded free recalls were analyzed and scored for each subject along several content-type dimensions. Recognition items were administered to subjects subsequent to collection of free recalls. Results did not support the hypothesis that inconsistent story outcome leads to disruption of recall for story line. Facilitating effects were noted in those groups with picture aids, however, on recall measures. Recognition measures did not substantiate this finding. Picture groups exhibited significantly better retention of spatial relationships on both measure types, however.

Conclusions from these studies lend support to a context-dependent perspective in picture-text research. Furthermore, these contexts are viewed as containing learner, environment and experimental variables which vary widely and serve to affect the functioning of pictures included with text. Implications for the interpretation of previously completed work and the design of new research are outlined.

THE USE OF CONTEXTUAL AND GRAPHOPHONIC INFORMATION BY AVERAGE SECOND- AND FOURTH-GRADE READERS Order No. 7913476

GUNNISON, Judith Anne (Kuehn), Ph.D. University of Illinois at Urbana-Champaign, 1978. 95pp.

The present study examined the oral reading errors of average readers in grades 2 and 4 to determine whether they used predominantly contextual cues, graphophonic cues, or both when they attempted to identify unfamiliar words. Both groups of readers had attended the same school since kindergarten and had participated in a reading program that included two major basal series, Programmed Reading (1968, 1972) and Ginn 360 (1969, 1973).

Results of this study when considered in light of previous research suggest that beginning reading method exerts an influence on the subsequent word-identification strategy. Both groups of readers made a significantly greater proportion of graphophonically similar errors than contextually appropriate errors. This finding suggests that the strategies of a majority of the subjects in this study reflected a predominant amount of attention to graphophonic information despite the fact that the instructional program after first-grade included instruction in the use of context.

Because significant differences were found in the numbers of contextually appropriate and graphophonically similar errors made by the 2 groups, grade level differences in the use of cues are suggested. When these differences were examined in more detail, the fourth graders were found to make significantly greater numbers of contextually appropriate errors. The results suggest that, while the second graders used predominantly graphophonic cues, the fourth graders used both contextual and graphophonic cues when attempting to identify unfamiliar words. This may reflect increased maturity in their reading ability.

THE EFFECTS OF THE INTERACTION OF SYNTACTIC COMPLEXITY AND THE EXPLICITNESS OF CONNECTIVE PROPOSITIONS ON FIFTH GRADERS' COMPREHENSION OF PROSE MATERIALS Order No. 7820627

IRWIN, Judith Westphal, Ph.D. The University of Wisconsin-Madison, 1978. 200pp. Supervisor: Associate Professor Kenneth L. Dulin

Many writers, in an attempt to shorten sentences for the purpose of lowering the readability-level of their materials, have eliminated connective words from complex sentences in order to rewrite them as simple sentences. The purpose of the present study was to investigate the effect of this manipulation on fifth-graders' comprehension of prose materials. On the basis of previous research on linguistic inference and constructive theories of comprehension, it was predicted that the elimination of a connective word from the surface structure would reduce the comprehension of both the connective concept and the concepts connected by that connective.

Two experiments were performed, each involving 32 fifth-grade students from a middle-class suburb who had scored within one standard deviation of the mean for their grade level on a recently administered test of reading achievement. In Experiment I, the experimentally-manipulated connective word was "because." In Experiment II, the experimentally-manipulated connective word was "after."

For each experiment, three 60-word passages were adapted from fifth-grade American history texts, and two versions of each of these passages were developed. The explicit passage-version contained the critical word in a complex sentence, while in the implicit passage-version the critical word was removed and the complex sentence was rewritten as two simple sentences.

The subjects in each experiment were then randomly divided into treatment groups and asked, in an individual-testing situation, to silently read and then orally recall each of the three passage-versions for the treatment-condition to which they had

been assigned. After a brief intervening task, they were asked to answer 3 forced-choice questions which had been designed to test their comprehension of the critical connective concepts. The comprehension of the connected concepts was measured by means of a count of the number of propositions in the connected clauses which were recalled by the subject.

The results of the causal experiment indicated that these students did not generally understand these causal relationships, which were logically reversible and presented in reverse temporal order, regardless of whether they were stated implicitly or explicitly. The results of the time-sequence experiment indicated that these students generally did comprehend the time-sequence relationships, which were logically reversible and presented in the normal temporal order, regardless of whether they were stated implicitly or explicitly. Thus, it was concluded that the type of connective concept in the text base may be a more important readability variable than is its implicitness or explicitness.

Generally speaking, in neither experiment were there any differences between the mean numbers of connected concepts recalled for each passage by the groups of subjects who answered the related forced-choice questions correctly and those of the groups of subjects who answered the related forced-choice questions incorrectly. There were, however, consistently significant differences between the numbers of connected concepts recalled by the very small groups of subjects who included the connective concepts in their recall and those of the groups of subjects who did not include those concepts in their recall, according to Mann-Whitney U-tests ($\alpha = .016$). Thus, partial support was found for the theory that the comprehension of a connective is associated with the comprehension of the connected ideas.

A DEVELOPMENTAL INVESTIGATION INTO LOW ABILITY AND HIGH ABILITY READERS' COMPREHENSION OF INTRASENTENTIAL ELLIPSIS (DELETION) IN WRITTEN DISCOURSE Order No. 7912188

KUBILIUS, Aušra Marija, Ed.D. Boston University School of Education, 1979. 156pp. Major Professor: Dr. James Flood

The major purpose of this study was to investigate readers' comprehension, measured by correct responses, of anaphoric, within-sentence ellipsis (deletion) items. To determine if such comprehension was a function of reading ability and/or age, Low Ability and High Ability readers (dichotomized according to standardized reading achievement test scores and teachers' judgments) in Grades 4, 7, and 10 were selected from students in two school districts. There were sixteen readers in each of the six reading ability-grade groups. Thus, this study had a 2 x 3 factorial design, with equal cell sizes.

The Ellipsis Test Booklet was the randomly ordered instrument with which all the readers were tested to assess ellipsis comprehension. It included fifteen classified ellipsis items embedded in fifteen three-sentence passages, largely based on Grade 4 reading materials. The Ellipsis Test Booklet also included three control items embedded in passages.

The readers were tested on their comprehension of items in three ellipsis categories: (1) single, (2) compound, and (3) selected. The single category included items with one explicit semantic unit, with optional modifiers, in the ellipsed antecedent. The compound category included items with two conjoined, explicit semantic units, with optional modifiers, in the antecedent. The selected category included items with non-explicit, or in one case explicit but very long, antecedents.

This study had two secondary purposes: (1) to determine if the ellipsis categories had a difficulty ordering according to readers' responses, and (2) to determine if ellipsis types (nominal, verbal, and phrasal) had a difficulty ordering according to readers' responses.

The results of two-way analyses of variance indicated that reading ability and age (as measured by grade) had a statistically significant ($p < .05$) effect on the comprehension of all three ellipsis categories.

Group means of correct responses indicated that High readers within all grades comprehended all three ellipsis categories better than Low readers in the respective grades. Group means also indicated that in all but one instance (where a ceiling effect was evident) comprehension of all three ellipsis categories increased with age within both reading ability levels.

Scheffé contrasts were conducted to test for statistically significant group differences. The most prominent results were that, on the compound and selected ellipsis categories, Low readers in Grade 4 scored significantly lower and High readers in Grade 10 scored significantly higher ($p < .05$) than the other ability-grade groups. There were few other significant group differences on these ellipsis categories. On the single ellipsis category, a ceiling effect was evident--all groups beyond Low 4 evidenced mastery.

Results of probabilities of rank-orderings indicated a difficulty ordering of (from easiest to most difficult) single to compound and selected ellipsis categories, and nominal to verbal to phrasal ellipsis types.

An analysis of errors on compound and selected ellipsis items indicated that, generally, a minimal distance principle strongly affected readers when inferencing antecedents to resolve the ellipsis, to fill the null slot of an ellipsis item. The exception was Low readers in Grade 4 on whom the minimal distance principle had a weaker effect.

The results suggest that comprehension of ellipsis is sensitive to reading ability and is a developmental skill. The results also suggest that comprehension, as measured by correct responses, of ellipsis is not a static, general inferencing skill. Rather, it fluctuates according to particular categories and types of ellipsis antecedents.

THE INFLUENCE OF READING ABILITY AND MODE OF PRESENTED INFORMATION ON THE PERCEPTION OF EVENTS Order No. 7912049

MARR, Mary Beth, Ph.D. University of Minnesota, 1978. 171pp.

Recent theories of comprehension postulate that perception and comprehension are interactive (Neisser, 1976). One facet of this interaction is the perception of events (i.e., sequential activities). The present investigation examined children's ability to perceive events; two aspects were emphasized 1) specific memory for events presented and 2) the ability to abstract an event theme and identify test items as consistent/inconsistent with a previously presented event. Reading ability (good and poor) and mode of event presentation (pictorial, textual, auditory) were independent variables chosen to examine the nature of event perception.

Seventy-two fourth grade students from a suburb of St. Paul, Minnesota participated in the study. They were grouped according to reading ability (good or poor) based upon standardized reading achievement test scores.

In the experiments, three event sequences familiar to children were constructed in the picture, text and auditory form. For each event, equivalent semantic content was established across modes of presentation. The presentation set consisted of five items (i.e., sentences, pictures) for each event. The recognition test set was comprised of eight items per event. One-half of these test items were "old" (previously presented), the other half "new", new items were either consistent or inconsistent with the presentation sequences.

Students were blocked on reading ability and stratified randomly into one of three modality conditions. They were presented all three events in a fixed order then given corresponding recognition test items. Presentation and testing were conducted in the same mode. In Experiment 1, students were to identify test items as "old" or "new." In Experiment 2, they indicated which test items logically fit with the presentation sequences. The statistical design was a 2 x 3 x 3 factorial with two repeated measures factors.

The results revealed that both good and poor readers integrated event items and abstracted an event theme across picture, text and auditory presentation modes. Integration effects (false recognition of new items) occurred only with Sequence 1.

A follow-up study in which event presentation order was reversed revealed that integration was due to content not presentation order. On the decision task, poor readers made more errors than good readers. Also, pictures elicited more errors than other modes of presentation; however, poor readers made errors in the text condition. In addition, Sequence 1 elicited more errors than the other two sequences. Follow-up tests indicated that responses to Sequence 1 were due to order effects.

These findings were interpreted as evidence that the experimental task was differentially sensitive to testing condition variables. Given a specific memory set, event content resulted in increased false recognitions. Conversely, given a set for decision making, serial position of the event resulted in tighter "fit" criterion; more errors occurred with the first than the last event. Both reading ability and presentation mode were factors which influenced decision-making performances. The picture mode was more ambiguously interpreted than either the text or auditory mode perhaps because item relationships were implied not explicitly stated.

A series of post hoc cross-modal studies were designed to compare responses on belonging decision tasks across presentation and testing modes. Utilizing the same materials, the comparison studies included: 1) a pictorial presentation mode and textual test set (PT), 2) a textual presentation mode and pictorial test set (TP), and 3) a TP condition with specific instructions to image what was read. The findings supported the argument that ambiguity of pictures over text increased the incidence of errors for belonging decisions. Errors were more pronounced when pictures were used as recognition test items than as presentation items.

The findings reflect the influence of content variables upon integration. A factor not addressed in previous integration research. In addition, the ambiguous role of pictures on the decision tasks is evident.

THE STRUCTURE OF SEMANTIC MEMORY FOR TEXT
Order No. 7911612

MARSHALL, Nancy, Ph.D. Cornell University, 1976. 359pp.

This research was designed to probe the structure of memory for text by analyzing the underlying semantic structure of text and comparing it to that of subjects' recalls. It was hypothesized that differences in textual structure would produce predictable differences in the subjects' recall for the content of the passages.

Four structural variables were manipulated. 1) Whether or not the logical relations were explicitly stated in the text. 2) Whether or not the relative relations were explicitly stated in the text. 3) Whether the main idea appeared at the beginning or the end of the paragraph. 4) Whether four clauses were ordered so that the relation considered more important to understanding was expressed or not.

When the four manipulations were combined in all possible ways, a version of the text was written for each combination. Paragraphs on two different topics, graphs and sonnets, were written. They were made as structurally similar as possible. Each had 115 words, the same logical and relative structures, the same topical organization, and a similar number of propositions. Because the paragraphs were so short, they were placed between two unvarying paragraphs of 73 and 87 words. Materials were designed for group administration.

One-hundred sixty subjects, ten randomly assigned to each version of the passages, participated in the experiment. Of these, 112 were community college students and 48 were Cornell undergraduates.

The subjects read one version of the passages, recorded time to read, and wrote free and probed recalls. They then repeated this procedure for the same version of the second passage. Passage order was randomized.

All recalls were scored by comparing the underlying structure of the recalls to those of the passages. Each item in the text and the recall received a score of one, and each item in the text but not in the recall received a score of zero.

Results of this analysis indicated that the Cornell subjects' recalls were more complete than those of the community college subjects. A t-test of difference produced significant differences. Thus all subsequent analyses were performed twice, once for each population.

An analysis of variance produced further evidence for the difference between the two populations. The community college subjects recalled significantly more content when the logical and relative relations were made explicit in the text. These manipulations made no differences in the recalls of the Cornell subjects. Other results of the ANOVA indicated that recalls for the passage on graphs was more complete than that for the passage on sonnets (probably because subjects knew more graphs) and that probed recalls were more complete than free recalls.

A frequency count for each item was then performed. The primary finding again differentiated between the two populations. The community college subjects tended to recall more isolated concepts and fewer propositions while the Cornell subjects tended to recall more propositions and fewer isolated concepts. Other results indicated that frequency of recall could be accounted for by position of the items in the underlying hierarchy, the main idea being recalled most frequently.

The most important result was that showing different recall patterns for the two populations. It is reasonable to conclude that the Cornell subjects are better readers and that the community college subjects need more structural information for optimal comprehension.

Evidence has been presented to support the hypothesis that logical and relative relations are important structures in semantic memory. Staging (order) does not seem to be part of memory, but rather an operation performed when turning memory into text. The content of memory for text seems to be related to prior knowledge and to the underlying hierarchical structure of text.

ELEMENTARY CHILDREN'S UNDERSTANDING OF ANAPHORIC RELATIONSHIPS IN CONNECTED DISCOURSE
Order No. 7903325

MOBERLY, Peggy Geralyn Compton, Ph.D. Northwestern University, 1978. 168pp.

The purposes of this study were to test the differences between the understanding of four types of anaphoric relationships in three different locations in connected discourse by fourth and sixth grade subjects of average or better reading ability. The subjects were given stories in which lexical, reference, substitution, and ellipsis presuppositions (as identified by Halliday and Hasan in Cohesion in English, 1976) were placed in immediate, mediated, or remote positions throughout the passages. Subjects then identified and wrote down the presupposed item of underlined anaphoric forms.

The following research questions were posed:

1. Is there a difference in fourth and sixth graders' performance on an anaphoric identification task?

2. Is there a pattern of understanding of the four anaphoric types that suggest a hierarchy of anaphoric form comprehension for each grade level?

3. Does anaphoric type make a difference in the students' understanding?

4. Does the location of the presupposition (tie location) make a difference in the students' understanding?

The data were analyzed by a three-way analysis of variance with repeated measures. Three significant main effects were found: difference between grades was significant at the .05 level; differences among anaphoric types were significant at the .01 level; and differences among tie locations were significant at the .01 level.

The Neuman-Keuls multiple comparison test determined that there was a significant difference between the means of lexical and reference anaphoric forms, reference and ellipsis anaphoric forms, immediate and mediated ties, and immediate and remote ties.

There were two significant interactions: anaphoric form x tie location and grade x anaphoric form x tie location. Therefore the main effects must be qualified in terms of these interactions.

The percentage correct scores on the performance task were graphed according to anaphoric type identified and a hierarchy of anaphoric understanding was suggested.

The basic conclusion was that elementary children do not satisfactorily understand anaphoric forms. This finding concurs with the results of the Bormuth et al. (1970), Chai (1967), and Richek (1976) studies.

However the follow-up interviews, even more than the grand mean tie comparisons, indicated that tie locations were an important factor in determining the children's understanding level.

Classroom implications are that teachers may need to be more conscious of cohesive elements in connected discourse such as the four types of anaphoric relationships used in this study, and in turn, make the children more aware of the intersentence relationships they play in various locations in the passage.

THE INFLUENCE OF WORLD KNOWLEDGE AND METACOMPREHENSION ABILITY ON CHILDREN'S COMPREHENSION OF SHORT NARRATIVE PASSAGES
Order No. 7912554

PACE, Ann Jaffe, Ph D. University of Delaware, 1979. 177pp.
Professor In Charge: Dr. Ludwig Mosberg

The contributions of two factors to children's understanding of short narrative passages was investigated: their existing knowledge of the situations described in the stories and their metacomprehension ability, or awareness of the degree of their own understanding and the extent to which they can utilize effective means to improve it. These two factors may clarify how children comprehend stories and help explain developmental differences in comprehension.

The notion of a "script" was used to characterize the organized knowledge of familiar, everyday events, and the prediction was made that even young children would have scripts for very common situations, such as shopping in a supermarket. Lists of invariant script elements were developed for two situations judged to be highly familiar, two for events thought to be somewhat less familiar, and two for generalized instances of familiar situations. Stories were written for each of these situations. One form of each story contained all relevant script information; another form omitted certain script-related items. Children who had scripts for these events were expected to have adequate comprehension of the stories, regardless of the form of the story they heard. Two stories were also written about situations thought to be unfamiliar to all of the children: making lye soap and making a lithograph. Although these stories contained all the information needed to answer questions about them, only the older children were predicted to understand them satisfactorily. Comprehension of such stories may require the ability to monitor one's level of comprehension and to employ strategies to insure understanding. Upper elementary-grade students were thought more likely to have such ability.

Children in kindergarten and the second, fourth, and sixth grades listened twice to one story at each of the four levels of familiarity, after the knowledge they had about each story situation had been determined. Following each story, they answered questions about it. Children who did not answer every question about the "unfamiliar" story correctly had an opportunity to request to relisten to the story to correct their responses. Their success in doing so was noted. Students then participated in an interview which probed their awareness of their own degree of comprehension and the resources they might utilize to improve comprehension.

Results supported predictions concerning developmental differences in scripts for various situations and the relationships among existing knowledge, story familiarity, comprehension, and metacomprehension. Children at all grades had nearly perfect scripts for the presumably highly familiar situations, while none demonstrated knowledge of the unfamiliar topics. Knowledge of the somewhat unfamiliar events was lowest among kindergarteners, who also had less complete general scripts. All children had relatively good comprehension of the stories about highly familiar events, regardless of story form, but kindergartners performed more poorly on stories concerning less familiar situations. Children in the other grades, who were better acquainted with these situations, had correspondingly better comprehension of them. Sixth graders scored significantly better than younger children on "unfamiliar" stories. More of the older children also knew they could relisten to the story, and when they did so, they corrected a higher proportion of their responses. The interview data revealed, too, that proportionately more older students realized they had resources they could use to improve comprehension. Younger children tended to respond that they would turn to older siblings or adults for help. Thus, existing knowledge does seem to influence the extent to which stories are understood; and when events are highly familiar, grade-level comprehension differences may be minimal. However, comprehension of unfamiliar material may require a high degree of self-awareness which was most evident in the oldest children in this investigation.

SENSITIVITY TO WHAT IS IMPORTANT IN PROSE: A DEVELOPMENTAL STUDY
Order No. 7913577

PICHERT, James William, Ph.D. University of Illinois at Urbana-Champaign, 1978. 116pp.

Two studies assessed third, fifth, and seventh grader's sensitivity to the relative importance of parts of prose. In the first study children's ratings of importance were compared with adults'. Raters had been assigned one of two directed perspectives or no directed perspective. Third graders were later asked to recall the story and also to rate the ideas again. In the second study new groups of third, fifth, and seventh graders were assigned to one of the perspective conditions and were asked to recall the story. Following initial recall subjects listed all the perspective relevant information they could remember. Then they were asked to shift perspectives and list all the new-perspective relevant ideas they could. Subjects not initially assigned a perspective were asked to list new-perspective relevant items in counterbalanced order.

It was found that children's importance ratings were much more similar to adult ratings when perspectives were assigned. No matter what the perspective condition, however, children agreed more with peers than with adults about what was and wasn't important. The relationship between importance ratings and initial recall was positive, but low. It appears that many perspective relevant story elements are recalled only when students are specifically asked to keep the perspective in mind at recall. Idea units which convey the plot line of a story are given low ratings, relative to idea units which convey perspective relevant detail, by subjects doing the ratings from an assigned perspective.

Both encoding and retrieval processes influence what children recall about a brief narrative. More important than unimportant text elements are recalled. Keeping a perspective in mind helped most subjects remember text elements they thought they had forgotten. Finally, there was some evidence that sensitivity to importance contributes to reading comprehension over and above decoding skill.

Results were discussed in terms of the knowledge frames which are presumed to subsume the information contained in the story.

THE EFFECT OF DOGMATISM AND READER ATTITUDES ON STANDARDIZED MEASURES OF READING ABILITY AND THE COMPREHENSION OF CONTROVERSIAL MATERIALS Order No. 7910018

REAMAN, William Clair, Ed.D. Temple University, 1979. 118pp.

Purpose and Scope of the Study

The purpose of this investigation was twofold. The first purpose was to determine the relationship between open- and closed-mindedness and standardized measures of reading ability. The second purpose was to determine the effects of open- and closed-mindedness on the reading comprehension of printed materials presenting the conservative and liberal views on the issue of capital punishment, when the political attitudes of the reader are known.

Subjects for this investigation included fifty-eight white males in the twelfth grade from a suburban public school in the Philadelphia area. In order to investigate the relationship between open- and closed-mindedness and reading comprehension, this study utilized standardized measures of word knowledge, literal reading comprehension, and critical reading comprehension, in addition to the Rokeach Dogmatism Scale, the Rokeach Opinionation Scale, and three prose stimulus selections presenting two opposing viewpoints on capital punishment and a neutral topic. The subjects were divided into a high dogmatic group and a low dogmatic group. Mean comprehension scores for each group were compared with respect to standardized and informal measures of reading ability. Another aspect investigated was the effect of reader attitudes (political and personal preference) on the comprehension of controversial materials, such as the capital punishment issue.

Findings

In the area of reading comprehension, the significantly inferior performance of the closed-minded subjects reflected and confirmed the findings of earlier research which suggested that closed-mindedness adversely affected the ability to interpret and evaluate arguments, recognize logical assumptions and apply inferential thinking skills (Luck & Gruner, 1970).

Not only did the high dogmatic and low dogmatic groups differ significantly in terms of their reading comprehension scores on informal, classroom measures of reading ability, but this same trend was apparent on standardized measures of word knowledge and literal reading comprehension as well as critical reading comprehension. Also, highly significant negative correlations between dogmatism and the above-mentioned standardized measures of reading ability indicated that students who scored high on the Rokeach Dogmatism Scale tended to score rather low on standardized measures of reading ability.

With regard to the political preference (either conservative or liberal) and the personal preference (either favorable or unfavorable) of the subjects concerning the capital punishment issue, the findings indicated that reader attitudes did not significantly influence the comprehension of controversial materials.

Implications

Implicit in this research is the need to alert classroom teachers concerning the adverse effects of closed-mindedness in the area of reading comprehension. To enhance the instructional situation for those students who are relatively closed-minded, as measured by the Rokeach Dogmatism Scale, the classroom teacher could provide more small group instruction in a nonthreatening environment which would allow students to express their opinions and feelings concerning controversial issues.

A replication of this study, using a larger population of high school boys and girls, might provide some confirmation and extension of the present findings.

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